Attorney Docket No. 47513-CPA2-RCE (71106)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT	Peter W.J. Jones	EXAMINER:	NGUYEN, Thong Q.
U.S.S.N.:	09/094,052	GROUP:	2872
FILED:	June 9, 1998	Conf. No.	7937
FOR:	METHODS FOR REFLECTION REDUCTION		

Board of Patent Appeals and Interferences
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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By: Lynne M. Hawkes
Lynne M. Hawkes

Letter of Re-Transmittal of Brief On Appeal

Sir:

Applicant was contacted by the Examiner today regarding the status of the Application. During the discussion, it became clear that the previously filed Brief on Appeal was not entered into the USPTO file history wrapper (*n*, image file history) for the subject application.

Accordingly, the Examiner requested a copy of the express mail package submitted by Applicants be sent to the USPTO main facsimile number. In addition, to forwarding a copy of the requested copy, Applicant also is enclosing a copy of the return postcard that acknowledges receipt of the submitted documents by the USPTO Mailroom on May 9, 2006.

Applicant also pursuant to the Examiner's request is forwarding the within Letter of Re-Transmittal and the enclosures therewith to the Examiner's rightfax number [(571) 273-2316].

Applicant believes that additional fees are not required for consideration of the within Letter of Re-Transmittal of Appeal Brief. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. **04-1105.**

Respectfully submitted,
Edwards Angell Palmer & Dodge, LLP

Date: June 18, 2007

By: _____

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WJD

Inventor: Peter J. Jones

Atty Docket No.: 47513CPA2(71106)

Application No.: 09/094,052-Conf. #7937 Filing Date: June 9, 1998
Title: METHODS FOR REFLECTION REDUCTIONS

Documents Filed:

Certificate of Express Mailing (1 page)

Fee Transmittal (1 page)

Petition for 5 Month Extension of Time (1 page)

Brief on Appeal including appendices (enclosed) (47 pages)

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Atty Docket No.: 47513CPA2(71106)

Inventor: Peter J. Jones

Application No.: 09/094,052-Conf. #7937 Filing Date: June 9, 1998
Title: METHODS FOR REFLECTION REDUCTIONS

Documents Filed:

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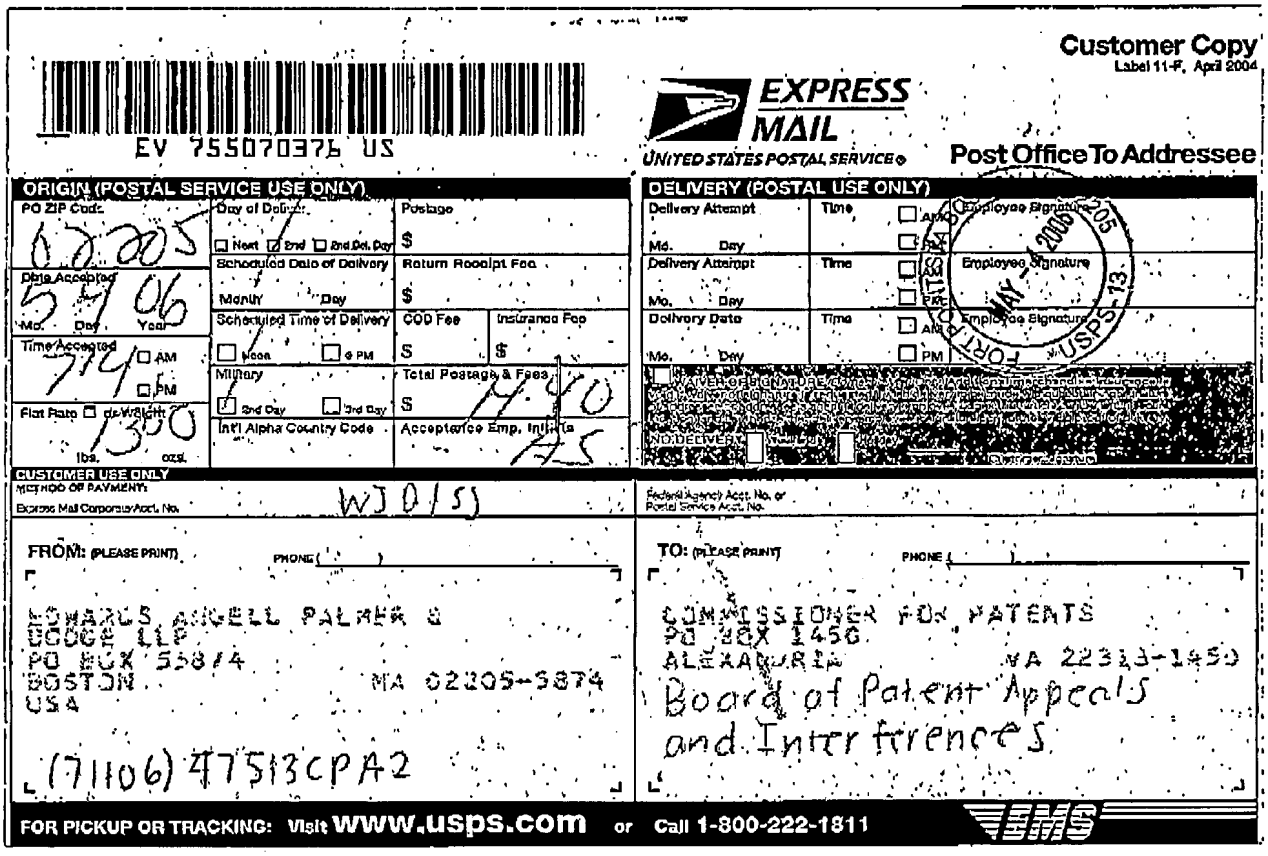

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Application No. (if known): 09/094,052 Attorney Docket No.: 47513CPA2(71106)

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William J Daley Jr.
Signature

William J. Daley, Jr.
Typed or printed name of person signing Certificate

35,487
Registration Number, if applicable

Telephone Number

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Fee Transmittal (1 page)
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FEE TRANSMITTAL
For FY 2006

[x] Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 1,330.00

Complete if Known	
Application Number	09/094,052-Conf. #7937
Filing Date	June 9, 1998
First Named Inventor	Peter J. Jones
Examiner Name	T. Q. Nguyen
Art Unit	2872
Attorney Docket No.	47513CPA2(71106)

METHOD OF PAYMENT (check all that apply)

[ ] Check [ ] Credit Card [ ] Money Order [ ] None [ ] Other (please identify): _____

[x] Deposit Account Deposit Account Number: 04-1105 Deposit Account Name: Edwards Angell Palmer & Dodge LLP

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FEE CALCULATION (All the fees below are due upon filing or may be subject to a surcharge.)

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 20 =	_____ x	_____ =	_____

HP = highest numer of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee ($)	Fee Paid ($)
_____ - 3 =	_____ x	_____ =	_____

HP = highest numer of independent claims paid for, if greater than 3.

Multiple Dependent Claims	
Fee ($)	Fee Paid ($)
_____	_____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
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4. OTHER FEE(S)

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Non-English Specification, $130 fee (no small entity discount)	
Other (e.g., late filing surcharge): 2255 Extension for response within fifth month	1,080.00
2402 Filing a brief in support of an appeal	250.00

SUBMITTED BY					
Signature	William J Daley	Registration No. (Attorney/Agent)	35,487	Telephone	(617) 439-4444
Name (Print/Type)	William J. Daley, Jr.			Date	May 4, 2006

543513

Attorney Docket No. 47513-CPA2-RCE (71106)

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By: William J. Daley
William J. Daley. Jr.

BRIEF ON APPEAL

Sir:

This is and appeal from the final rejection of May 4, 2005 of claims 1, 4, 5, 7 11 and 13-15.

BRIEF ON APPEAL FEE

Authorization to charge Deposit Account No. 04-1105 for $250.00 is provided herewith. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. 04-1105.

REAL PARTY IN INTEREST

The real party in interest is Tenebreax Corporation. The assignment of the inventors to this corporation was recorded on June 9, 1998 at Reel/ Frame 9241/0526.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to Appellant, Appellant's legal representative or the assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal.

STATUS OF THE CLAIMS

Claims 1, 4, 5, 7, 11 and 13-15 stand final rejected. Claims 2-3, 6, 8-9, and 12 were previously canceled.

STATUS OF THE AMENDMENTS

There is no amendment after final to the claims.

A clean set of the claims on appeal is set forth in the Claim Appendix hereto.

SUMMARY OF THE INVENTION

The present invention includes an apparatus for reducing reflection on a surface of an optical lens assembly that has a wide angle of view. Such an apparatus includes a plurality of

concentric circular vanes, each of the vanes including a first end proximate the surface. The second end of the plurality of vanes is away from the surface. The first ends of the plurality of vanes are positioned closer together to each other than said second ends of said plurality of vanes. In more particular embodiments, the optical lens assembly includes optical lenses, wide FOV lenses, binoculars, telescopes, gun sights and night vision goggles. In further embodiments, the first ends of the plurality of vanes are positioned further apart from each other than the second ends of the plurality of vanes and the plurality of radial vanes are interconnected with the plurality of concentric circular vanes.

The following more particularly describes the present invention, where particular reference should be made to pages 4-7 of the subject application as well as to the figures referred to in the discussion that follows. In this regard, and for the convenience of the Board Members, a copy of Figs. 6-15 that are referred to below are provided in the Evidence Appendix, Tab A. Also, and for the Board Members convenience, a copy of each of the three references forming the basis for the grounds for rejection and provided in the Evidence Appendix, Tabs B-D.

There is shown in Fig. 6 a shield made up of deep tubes 32, the walls of which are not parallel, which shiled is placed in front of a wide-angle FOV optic 33. As shown in FIG. 7, such a shield would seem to have a structure 32 that would vignette the FOV 13 seen through a wide-angle FOV optic 33; as explained hereinafter this is not the case. See page 4, line 29 - page 5, line 3 of the subject application.

There is shown in Fig. 8, a common explanation found in physics text books of how a lens forms an image, in which a point 40 on the top of a lens 41 forms the image 42 of the top of

the subject 43, such as a candle, and the point 45 at the bottom of the lens forms the image 47 of the bottom of the subject 48. What actually happens is shown in FIG. 9, where each point on the lens, as shown with point 51, forms the image 54 of the entire subject 53. With this in mind, and with reference to Fig. 10, there is shown a further embodiment of the present invention, wherein the cell walls 60 that make up the tubes of the anti-reflection shield are arranged such that the walls are parallel to the varying view angles 61 contained within the optic's FOV. See page 5, lines 6-17 of the subject application.

As shown in Fig. 11, while in such an arrangement a tube wall 66 would block a point 62 at the top of the lens from seeing on a viewing angle 65 downwards to the bottom part of its normal FOV, there is a point 67 at the bottom of the lens that would have an unobstructed view on the view angle 65 through the tube formed by wall 68. Thus with this arrangement of tubes, the optical system will, *in total*, be able to maintain its full FOV in order to form a complete image, and the tubes in the shield can be made long enough to give effective glint protection.

In other words, the optical system of the present invention would be capable of maintaining its full field of view and thus allow the user of the optical system to see a complete image. As further explained in the subject application (see page 6, lines 22-27 thereof) that with this configuration, most points on the surface of the objective lens will have some of their lines of view blocked. This may cause a greater light loss than with the light loss from the earlier method of using a honeycomb of parallel-walled tubes. However, the increased light loss would be acceptable in many battlefield situations if this improved shield keeps the user of the optical device from being detected by the enemy because of reflections.

As also described in the subject application (see pages 5, line 28 – page 6, thereof) the tubes making up the anti-reflection shield can be arranged in various manners. For example, in a section through one embodiment of such a shield as shown in Fig. 12, the walls 60 could be arranged to form concentric tubes that have a conical section. These conical sections would be arranged so that their wall angles gradually splayed to accommodate the range of viewing angles contained or thin the wide-angle FOV 71 of the optical device to be protected 33. Alternatively, as shown in a section through another embodiment of such a shield in Fig. 13, the tube walls 60 could simply have one fixed angle and then be nested concentrically. The wall angles would be selected be related relation to the angle of the FOV of the optic that is to be protected 33. The center conical tube 77 would provide the clear sight lines to the center of the optic's FOV.

As shown in Fig. 14 in a section through yet another embodiment of such a shield, the walls that form the tubes 60 could splay inwards, rather than outwards. Further, with respect to the inwardly converging tubular elements as exemplified in Fig. 14, that tubular element configuration can provide the significant advantage of reducing reflections from a lens substrate that is significantly curved. That is, the inwardly converging tubular elements can effectively capture reflections from such a curved lens surface. Also, as shown in a front view in Fig. 15, to increase the glint masking ability of this new configuration of an anti-reflection shield, radial vanes 83 can be inserted between the concentric tubes 60 in a manner.

ISSUES

The issues on Appeal as to the rejections are:

1. Whether claims 1, 4, 5, 7, 11 and 14-15 are obvious within the meaning of 35 U.S.C. §103 as by Jones [USP 4,929,055] in view of Softly [USP 4,365,866].

2. Whether claim 13 is obvious within the meaning of 35 U.S.C. §103 as by Jones [USP 4,929,055] in view of Softly [USP 4,365,866] and further in view of Brennan [USP 4,323,298].

ARGUMENT

As to each issue Applicant has provide a separate argument applicable to the issue as indicated above. Unless otherwise indicated, any reference hereinafter in the Argument to specific reference numerals, pages or figures shall be to the pages and drawing figures of the subject application and the reference numerals used therein. Also, like reference characters/numerals denote corresponding parts.

FIRST ISSUE

CLAIMS 1, 4, 5, 7, 11 AND 14-15 ARE NOT OBVIOUS WITHIN THE MEANING OF 35 U.S.C. §103 AS BY JONES [USP 4,929,055] IN VIEW OF SOFTLY [USP 4,365,866]

The grounds for rejection asserts that Jones inherently discloses an apparatus for use with an optical device such as a binocular device, a telescope, a periscope, a riflescope, a night vision device or the like (see col. 1 thereof). Also, it is asserted that the apparatus disclosed by Jones teaches the use of a set of concentric circular vanes disposed in front of a lens surface of a lens assembly located within an optical device for the purpose of reducing the reflection of light incident on the lens reflecting surface of the lens assembly while still maintaining a substantially field of view for a user who makes an observation via the light passed through the vanes and the lens assembly. Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones (see fig. 9 thereof).

Thus, the arrangement of a set of vanes disposed in front of a lens surface having a curved shape of an optical device for reduction light reflections incident on the lens surface so that the light reflected from such lens surface is essentially not viewable by an observer located distal from the second ends of the vanes and so that a user viewing through the lens assembly can observe the image corresponding to the wide field of view of the lens assembly. The Offir Action further asserts that the only feature missing from Jones is that Jones does not clearly teach that the first ends of the concentric circular vanes are spaced further apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other as claimed in the present claims 1 and 15.

It is further asserted in the Office Action, that as to the arrangement of the vanes in front of an optical element, in another embodiment disclosed in column 5 of Jones and shown in figure 10 thereof, Jones has suggested that the vanes are arranged in a non-parallel manner and in inclined angles different from 90 degrees with respect to the lens reflecting surface of an optical device. It also is further asserted that while the embodiment provided at column 5, in Jones discloses the use of the inclined vanes in front of device having non-magnification feature such as a mirror or windshield; however, Jones allegedly teaches use of the inclined vanes in front of other optical devices having magnification.

It also is further asserted that the use of an array of vanes disposed in front of a lens surface having a curved shape for the purpose of reduction light reflections incident on the lens surface wherein the distance between two adjacent first ends near the lens surface of vanes is larger than the distance between two adjacent second ends farther from the lens surface of the

vanes for the purpose of reduction the light reflection incident on the lens surface is suggested to one skilled in the art from the system described in Softy. In particular, it is asserted that Softy discloses the use of an array of vanes (21) in front of a curved screen (11) and teaches that the vanes are arranged in a manner that the first ends near the curved screen is spaced further apart from each other at a different distance than the second ends disposed farther from the curved screen. See columns 2-3 and figs. 2-4, in particular, at column 2, lines 52-57 thereof which states: "In a television studio most of the ambient light falls towards the monitor screen from an upward direction rather from the side, and so the horizontally extending slats 21 are suitably positioned to intercept this light which would otherwise be reflected from the screen and impair the quality of the image."

Thus, it is asserted that it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones (column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes and the distance between two adjacent first ends near the lens surface of vanes is larger than the distance between two adjacent second ends farther from the lens surface of the vanes as suggested by Softy for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

Prior to addressing the grounds for the rejection in detail, Applicant first makes the following general observations regarding the rejection. Applicant would first note that the

phrases "wide-angle" or "wide-angle field of view" are not found in either Jones or Softly. While Jones makes reference to field of view, there is no specific reference to wide angle or wide angle field of view. This is not surprising as a text search of the issued patent for Jones that is available on the USPTO web site reveals that the phrase "wide angle" is not found in the issued patent. Also, such an assertion would be inconsistent with the express language in Jones. As to Softly, this reference clearly does not embody an optical device having an anti-reflection shield; thus, there can be no optical device having a wide angle field of view at all in Softly. In any event, a text search of the issued patent for Softly that is available on the USPTO website for Softly also reveals that the phrase "wide angle" is not found in the patent either. Also, such an assertion would be inconsistent with the express language in Softly.

Thus, as Jones and Softly do not use terminology relating to wide-angle field of view, it is improper to assert that these references inherently or expressly disclose use of anti-reflection devices with an optical lens assembly or an optical device having wide-angle field of view characteristics.

Secondly, Applicant would note that the example shown in Fig. 10 of Jones which forms a part of the grounds for the rejection and the entire disclosure in Softly which also forms a part of the grounds for the rejection are directed to use of a device(s) for minimizing or avoiding reflection from a surface of a non-optical device. In this regard, Jones specifically discloses that the term "non-optical" is being used in the sense that the device does not provide any optical magnification and that such a device might be a mirror or a glass surface such as the windshield 30 shown diagrammatically in Fig. 10 thereof. See Jones col. 5, lines 41-47.

Thus, the specific example from Jones and the Softly disclosure that is relied upon as support for the grounds do not relate at all to an optical lens assembly or an optical device much less one that is characterized as having a wide-angle field of view characteristic. Therefore, it is improper to assert that Jones and Softly inherently or expressly disclose use of anti-reflection devices with an optical lens assembly or an optical device having wide-angle field of view characteristics because the disclosures relied upon having nothing to do with optical devices as that term is used in Jones.

The following remarks are provided to address the grounds for rejection more particularly.

As indicated by Applicant during prosecution, claim 1 had been amended to clearly indicate that the user of the lens assembly is viewing the scene through the lens assembly and the anti-reflection apparatus. Also, claim 1 was amended to further provide that that the reflections from the surface of the lens assembly (*i.e.*, the surface of the lens) are not viewable by an observer that is distal or remote from the second ends of the anti-reflection apparatus. This was done so that the claimed structure was clearly different from the configurations disclosed in Fig. 10 of Jones and the disclosures of Softly which are non-optical types of devices.

Applicant has made the following observations in the subject application regarding the teachings and disclosures of Jones (see page 1, line 22 – page 3, line 7 thereof).

> An existing method of reducing or eliminating such reflections is to put a honeycomb grid of tubes in front of the objective lens (as is described in U.S. Patent #4,929,055, which is fully incorporated herein by reference). The tubes

in these devices have walls that are parallel to the optical axis of the device to which it is fitted.

This technique, however, is not an effective solution with wide-angle FOV devices, since if the length-to-width ratio of the tubes which make up the honeycomb of parallel-walled tubes is shallow enough not to vignette the view through the optic, then the tubes are not deep enough to give affective glint protection. This means that in a battlefield situation, wide-angle FOV optical devices are vulnerable to being detected by an enemy [sic.], and thus dangerous to use.

Accordingly, it is highly desirable, if not necessary, to devise other techniques for substantially preventing reflections from the reflecting surfaces of wide-angle FOV optical devices.

As can be seen in FIG.1, a reflective element 1 of an optical device 2 can reflect light rays 5 from a light source 3 to an observer 4. The Observer 4 includes sophisticated light detection systems possibly operating in the infrared and ultraviolet spectrums as well as human or animal observers.

An existing method of hiding such reflections is shown in FIG 2. where a honeycomb of parallel-walled tubes 6 is placed in front of the optical device 2. The walls of the tubes are parallel to the optical axis of the device to which it is fitted. This collection of tubes 6 prevents light from a source 3 from reflecting to an observer 4.

As shown in FIG. 3, the length-to-width ratio of the tubes 12 that make up the honeycomb cannot exceed the length-to-width ratio of the FOV 13 of the optical device to which it is fitted. In this way, the anti-reflection shield does not restrict field of view seen through the optical device.

As shown in FIG 4, an example of this would be the U.S. Army's PVS-7 night vision goggles, which have a FOV 13 of 40°. If one were to use the existing method of reflection protection, the length-to-width ratio of the deepest (longest) tubes 6 that could be used in a conventional anti-reflection shield are 1:1.38. This is not deep enough to give good glint protection. If deeper tubes are used, they would intrude on the FOV and vignette the image seen through the device, as illustrated in Fig. 5.

> The problem has been how to get tubes long enough to provide effective glint protection without vignetting the view through the optic.

Thus, the foregoing excerpt regarding the disclosures of Jones, at least in Applicant's view, that this the discussion regarding use of anti-reflection apparatus in combination with an optical device does not include the discussion starting in column 5, starting at line 38 thereof (*e.g.*, the discussion relating to "some applications" and the specific non-optical device example shown in Figs. 10-12 thereof). This is not surprising, as the patentee Jones and the applicant of the present invention are one in the same, and so it is not hard to see why applicant would know and understand more specifically what the patent teaches and discloses.

It appears that the principal basis for the Examiner's rejection is the language appearing in col. 5 line 35 through col. 6 line 16 which provides as follows:

> The tubular elements shown in the various above described embodiments of the invention are generally positioned so as to be substantially orthogonal to the reflective surface with which they are used. In some applications, it may be desirable to arrange them so that they are at other than a 90°angle with respect to the reflective surface in question. For example, FIG. 10 depicts an anti-reflective structure used with a non-optical device, the term non-optical being used here in the sense that the device does not provide any optical magnification. Such a device might be a mirror or a glass surface, such as a vehicle windshield 30 shown diagrammatically in FIG. 10 in a top view thereof. The vanes 31 which form the elements 32 are generally placed at various angles α other than 90°, with respect to the reflective surface of windshield 30 so as to follow the natural sight lines in the horizontal direction of an observer 33 looking through the windshield. FIG. 11 shows the vanes as positioned in the vertical direction wherein such vanes can be, if desired, arranged generally orthogonally to the windshield surface, the tubular elements

> of the overall structure being thereby positioned at various angles with respect to the reflective surface of windshield 30. The aspect ratios of each of the honeycomb-like elements 34, which are so formed, are selected to be substantially the same and can be selected as exemplified in FIG. 12. As seen therein, an exemplary aspect ratio (x/y) is depicted by the sides of rectangle 35 as shown. A desired aspect ratio can be selected to reduce reflections from sunlight, for example, which is expected to be directed at an angle with respect to the horizontal. For example, if the aspect ratio (x/y) of rectangle 35 is selected, reflections to an observer 36, for example, would be substantially reduced for sunlight angles greater than θ, but would not be so reduced for angles less than θ. Accordingly, the minimum angle from which sunlight is expected to be directed at the surface of the windshield 30 during use can be estimated, and the aspect ratio of elements 34 is appropriately selected as shown in FIG. 12 to reduce reflections of sunlight directed at such minimum angle, or greater.
>
> Structures in accordance with the invention can be relatively easily fabricated for use with the surfaces of many different types of optical devices or other reflective surfaces. Thus, in addition to use on binoculars, telescopes, periscopes, and the like, the structure can be used on vehicular windshields, head lamps, or side view mirrors, or the like.

As indicated above, the language referred in the above excerpt that is directed specifically to the example, is for a non-optical device which as indicated in Jones is a device that does not provided magnification. As such, it is completely improper to conclude that an anti-reflection device used for a windshield provides a basis to conclude that such a device would be reasonably successful if used with an optical device or a lens assembly that provides magnification.

As indicated in the subject application (see pg. 6, lines 22-27 thereof), for the configuration of vanes in the anti-reflection shield of the present invention most points on the

surface of the objective lens will have some of their lines blocked. Also, it is provided that this may cause greater light loss than with the light loss from the earlier method of using a honeycomb of parallel-wall tubes. As also provided in the subject application (see pg. 5, lines 1-3), the structure 32 of an anti-reflection shield according to an embodiment of the present invention is such that one could conclude that the structure would vignette the field of view 13 if seen through a wide-angle field of view optic 33. The subject application also provides that the common explanation found in physics text books of how a lens forms an image (see Fig. 8 thereof) is that a point 40 on the top of a lens 41 forms the image 42 of the top of the subject 43, such as a candle, and the point 45 at the bottom of the lens forms the image 47 of the bottom of the subject 48. In addition, the specific example also provides that the vanes are placed at various angles with respect to the windshield surface so as to follow the natual sight lines in the horizontal direction of an observer 33 looking through the windshield.

In sum and in view of the foregoing, there is no motivation or suggestion offered to one skilled in the art, to combine the teachings directed to the non-optical device example provided in Jones. One skilled in the art, would not have reasonable concluded, based on the teachings in Jones as well as the knowledge and understanding of those in the art, that the anti-reflection device described for the non-optical device application would not vignette the image being viewed by the optical device or optical magnifying lens assembly.

In contrast, the subject application explains why the basic explanation provided in physic text books is not what actually occurs. It also is the subject application, and not Jones, which provides that even though some lines of sight might be blocked by the tubes of the anti-reflection

shield of the subject application, the optical system will "in total" be able to maintain its fill field of view and thus be capable of forming a complete image. This, is nowhere described not disclosed in Jones.

The remarks on page 7 of the Final Office Action, also state that Softly discloses the use of a plurality of slats located in front of an optical lens having a curved lens surface which slats [sic.] are adjustable in their orientation for the purposes of reducing light reflection. Such a recitation apparently reflects an erroneous understanding of the disclosures and teachings in Softly.

As described in Softly, the slats 21 comprising the light masking device are configured and arranged so that the horizontally extending slats are disposed between a television monitor and a camera, where the slats are provided to address reflections off the television screen. As also described in Softly, the horizontally extending slats are viewed edge on by the camera 32 and so they do not interfer with the normal viewing by the camera 32 of the image being displayed on the screen of the monitor except to the extent of the slat's thickness which it is provided is minimal (*e.g.*, se col. 2, lines 57-61). It also is described in Softly that the horizontally slats are configured and arranged so as to be suitably positioned to intercept light that otherwise might be reflected from the screen and thus impair the image being displayed on the screen.

It is further provided that the slats 21 in Softly are constrained so as to converge on a horizontal line at a selected height and a selected distance from the screen of the monitor. Moreover, Softly further describes that the slats of the light masking device intercepts the light

from an upward direction because most of the light falls towards the monitor screen from the upward direction rather than the side.

In sum, Softly teaches that the slats, which are arranged to only extend horizontally and arranged so as to have a specific arrangement with respect to the camera, can prevent reflections from the surface of the television monitor. Thus, the slats in Softly are *not* provided so as to be in front of the lens of the camera 32 to prevent reflections off the camera kle4ns from being seen. This is particularly the case, because Softly specifically teaches that the slats 21 are differentially inclined with respect to the horizontal so as to converge on a horizontal line at a selected height and distance from the screen 11. It is further taught that the selection of height and distance depend upon the position chosen for the camera 32. Thus, in Softly the camera is remote from the slats and as taught in Softly the orientation of the slats is dictated so that they converge at a given height and distance from the screen whereat the camera 32 is presumably located.

Furthermore, it is not taught or suggested anywhere in Softly that a three dimensional array of such slats, such as in the form of concentric circles that extend lengthwise would have the same affect. Moreover, there is no teaching or suggestion that if an observer was on the television side of such a slat assembly that the observer could see through such a slat assembly. To the contrary, an arrangement of concentric vanes as taught by Applicant forms a structure where a vane could occlude a part of the scene being observed in contrast to a vane that is not at an angle with respect to normal from the lens surface. Thus, one skilled in the art would be more likely to conclude that such an arrangement of the slats would create an apparatus where the camera 32 would not be able to see the screen. In addition, it should be noted that the

arrangement of the camera, the slats and screen is not anywhere the same as that claimed by Applicant.

Finally, Softly teaches continuously modifying the angular orientation of the slats based on the location of the camera 32 with respect to the screen. Stated another way, Softly teaches adjusting the angular orientation of the slats as function of the height and distance of the camera from the screen. Therefore, what Softly teaches is continuously adjusting the angle of the slats so the camera/observer moves with respect to the television screen so that the camera/observer can see the television screen.

In sum, the teachings in Softly are not directed to the optical lens assembly of the camera but rather to the light masking device provided to shield the surface of a television monitor being observed by the camera so that light is not reflected off the television screen.

Therefore, Jones alone or in combination with Softly includes no teaching or suggestion of an apparatus for reducing reflection on a surface of an optical lens assembly that is configured so as to have a wide field of view (FOV), where the surface in question corresponds to an input end of the lens assembly in which is inputted light of the images being viewed. Further, there is no teaching or suggestion in Jones alone or in combination with Softly that such an anti-reflection includes a plurality of concentric circular vanes, mounted in front of said reflective surface of the optical lens assembly, each of said vanes including a first end proximate said surface, and a second end distal from said lens surface. Where said first ends of said plurality of vanes are spaced apart from each other at a different distance than said second ends of said plurality of vanes are spaced apart from each other, and where said first ends of said plurality of

vanes are spaced further apart from each other than said second ends of said plurality of vanes where light from an image to be viewed enters said second ends and exits said first ends and passes to said lens assembly input end. Also, Jones alone or in combination with Softly further teaches or suggests that said plurality of concentric circular vanes are arranged such that light reflecting from said lens surface is essentially not viewable by an observer located distal from said second ends and so that a user viewing through the lens assembly can observe the image corresponding to the wide field of view of the lens assembly.

It appears from a reading of the grounds for rejection and the remarks regarding Applicant's prior arguments, that Applicant's arguments are being ignored because of the decisions in, and holdings, of *In re Keller*, 208 USPQ 871 (CCPA 1981) and In re Merck & Co., 231 USPQ 375 (CAFC 1986). As discussed further below, the holding of *In re Keller* is being in appropriately applied in the present case and the holdings in the *In re Merck* decision makes this clear.

The Court in *In re Keller* noted that the sole issue regarding the prior art rejection is essentially whether the references taken collectively, would have suggested the use of digital timing in a cardiac pacer to those of ordinary skill in the art at the time the invention was made.[1] As the Court further noted

> To justify combining reference teachings in support of a rejection it is not necessary that a device shown in one reference can be physically inserted into the device shown in the other. (Citations omitted). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary

[1] 208 USPQ 871, 880.

> reference; nor is that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. (Citations omitted).

As to the references being cited in the grounds for the rejection, the Court in *In re Keller* provided the following.

> Both Keller and Berkovits disclose heart stimulators that use R-C type timing circuits. Walsh teaches the use of digital type timing circuits in place of R-C type timing circuits in conventional heart stimulators. Therefore, the question is whether it would have been obvious to one of ordinary skill in the art, working with the Keller and Berkovits and the Walsh references before him, to do what the inventors herein have done, that is, to use a digital timing circuit in a cardiac pacer. (Citations omitted). We agree that the references establish a prima facie case of obviousness. [2]

In reaching a similar conclusion, the Court in *In re Merck* noted that the expectation that compounds having similar structures would behave similarly was suggested in a Report. It also noted that the combination with those teachings, the prior art teaching that the precise structural difference between amitriptyline and imipramine involves a known bioisosteric replacement provides sufficient basis *for the required expectation of success, without resort to hindsight* (emphasis added). Although the Court indicated that obviousness does not require absolute predictability, a reasonable expectation that the beneficial result will be achieved is necessary to show obviousness. (Citations omitted).[3]

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[2] 208 USPQ 871, 881-882.
[3] 231 USPQ 375, 379.

In sum, it is clear from these two decisions that to avoid hindsight reconstruction one must show that the prior art clearly discloses a reasonable expectation of success or that there is a reasonable expectation that the beneficial result will be achieved.[4] Applicant respectfully submits that one could not conclude that, based on the disclosures of the Jones and Softly references, one skilled in the art would have been reasonably apprised that re-configured the concentric vanes taught in Jones for the optical device application with vanes that are at angle with respect to a normal to the surface of an optical lens assembly having a wide-angle field of view, would have allowed one to look through such an optical lens assembly and thence through the plurality of vanes and still be capable of observing a complete image (*i.e.*, not a vignetted image) while at the same time preventing light coming in from any angle from being reflected from the surface. Thus, and contrary to the assertion in the Office Action, *In re Keller* cannot be used as the basis for asserting there is motivation to combine Jones and Softly.

As also indicated above, in Softly, the slats 21 are disposed between the screen of a television monitor and a camera so that the camera can view the television screen and so that the horizontally extending slats are viewed edge on by the camera 32 (*i.e.*, so they do not interfer with the normal viewing by the camera 32 of the image being displayed on the screen of the monitor). In sum, Softly teaches providing slats to address reflections from a non-optical device the television screen and not the camera and re-orienting the slats as the position of the camera

[4] As provided in MPEP 2143.02, a prior art reference can be combined or modified to reject claims as obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 19866).

with respect to the screen changes. This is completely different from that being claimed by Applicant.

There also is no indication anywhere in Jones or for that matter Softly, of the problem identified in the subject application (problem has been how to get tubes long enough to provide effective glint protection without vignetting the view through the optic). There also is no suggestion anywhere in Jones or Softly that the solution to this problem is having the vanes arranged such that light reflecting from the lens surface of the wide-angle field of view lens assembly is essentially not viewable by an observer located distal from the second ends and so that a user looking through the lens assembly can observe the image corresponding to the wide-angle field of view capability of the lens assembly.

As noted above and in the subject application, the problem with the device and methodology disclosed in Jones was that a part of the image that would be ordinarily seen when using an optical device or lens assembly having a wide-angle field of view, is being blocked by the outwardly extending tubular members described in the optical device embodiment in Jones thereby vignetting the view through the optical device or lens assembly.

What the Examiner has failed to show is that the disclosures in Jones or Softly, alone or in combination reasonably apprises one skilled in the art of the problem and the particular solution to the problem as is taught in the subject application. There also is no showing why or how one skilled in the art would upon reading the disclosure in Jones or Softly , alone or in combination, would have been taught and also would have understood that a wide-angle field of view image would not be completely blocked by the outwardly extending circular vanes if the

angle thereof was adjusted as taught by Applicant while at the same time maintaining the capability of not reflecting light to an unwanted observer.

It was Applicant in developing the present invention who realized that the user looking through the optical device or lens assembly would perceive the entire image observable with a wide angle optical device or lens assembly even though a portion of the reflection reducing apparatus (*e.g.*, a portion of a vane) may occlude a portion of the image. Such occlusion while it may appear as a decrease in intensity will not cause a loss of the complete image. Thus, the vane adjusting language allegedly in Jones and identified in the Office Action does not teach one skilled in the art that there would be blockage of part of the image be viewed by a wide-angle field of view optical device or lens assembly if the reflection reducing structure described in Jones was modified so as to embody the characteristics claimed and taught in the subject application. In fact, one skilled in the art would have continued to believe that the occlusion of the image in any degree would mean that the image could not be fully perceived.

The Examiner also disagrees with the assertion that the reconstruction of the references is a hindsight reconstruction. Applicant would that basis asserted as to why one skilled in the art would have combined the art in the suggested fashion was "for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device." As indicated herein, the phrase wide-angle or wide-angle field of view does not appear in either Jones or Softly. Thus, it appears an improper to assert that the motivation for combining the references includes a phrase that is not found at all in Jones or Softly. In sum, the only place where one finds such a teaching is the subject application.

In the grounds for the rejection, it appears that the Examiner admits that the specific example in Figs. 10-12 is not for an optical device, but then attempts to use the sentence directly preceding the discussion as some how decoupling the non-optical device teaching provided in Jones from applying to the specific example directed to Figs. 10-12 in Jones. Applicant respectfully submits that the sentence is being read out of context with the rest of the paragraph.

The portion of the paragraph being referred to reads as follows:

> The tubular elements shown in the various above described embodiments of the invention are generally positioned so as to be substantially orthogonal to the reflective surface with which they are used. In some applications, it may be desirable to arrange them so that they are at other than a 90°angle with respect to the reflective surface in question. For example, FIG. 10 ...

It appears form the Examiner's remarks, that the phrase "some applications" in the second sentence is being interpreted as being inclusive of optical devices even though this is not so stated. As to the suggestion, that this is inclusive of only optical devices, such a meaning is inconsistent with the language of the following sentence that provided "For example, Fig. 10" which is admitted as being an non-optical device. Thus, a more consistent reading of the second sentence is that the some applications was directed to non-optical device applications particularly in light of the following discussion directed to FIG. 10 of Jones.

Moreover, it should be recognized that whatever the language this sentence in col. 5 is intended to mean, it is completely silent and lacks any detail, beyond the specific example, as to what applications are considered as being within the "some applications." The Federal Circuit

has indicated that a prior art reference that gives only general guidance and is not all that specific as to particular forms of a claimed invention and how to achieve it, may make a certain approach obvious to try, but does not make the invention obvious. *Ex Parte Obukowicz*, 27 USPQ2d 1063, citing *In re O'Farrell*, 853 F.2d 894, 7 USPQ2d 1673,1681 (Fed. Cir. 1988). Also, such a disclosure hardy corresponds to a teaching or suggestion that the modification suggested in the grounds for the rejection would be reasonably successful.

In conclusion, Applicants respectfully submits that:

(1) There is no express teaching or desire provided in either Jones or Softly to combine either reference. In re Keller does not provide a basis to make such a combination either.

(2) The express assertion in the Office Action that Softly teaches an optical device in which slats are provided in front of the lens of an optical device is erroneous. The only optical device in Softly is the camera and the camera is disposed a distance from the slats.

(3) The express assertion in the grounds for rejection of the claims in the Office Action that the embodiment shown in Figs. 10-12 in Jones is an optical device, is inconsistent with other admissions in the Office Action and also if so asserted would be clearly erroneous.

(4) Jones and Softly do not provide any suggestion, teaching or disclosure that the modification suggested by the combination would be reasonably successful.

(5) Jones and Softly do not anywhere described the vignetting problem described in the subject application for optical devices or lens assemblies having a wide-angle field of view, in particular with regards to the disclosures in Jones. There also is no description of the solution to the problem described in Jones or Softly.

(6) The teachings in Softly for variable orientation of slats is directed to the changing of the angular orientation of the slats dependent upon the location of the camera with respect to the television screen. Thus, in Softly the angular orientation is taught as being changed as the camera moves with respect to the television screen.

(7) In Softly the external light sources of concern are in fixed relation to the television screen, whereas the present invention is concerned with light coming from different and changing locations with respect to the lens assembly.

As provided in the MPEP, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F. 2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F. 2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). As provided above, the references cited, alone or in combination, include no such teaching, suggestion or motivation.

Furthermore, and as provided in MPEP 2143.02, a prior art reference can be combined or modified to reject claims as obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 19866). Additionally, it also has been held that if the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. Further, and as provided in MPEP-2143, the teaching or suggestion to make the claimed combination and the reasonable suggestion of

success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). As can be seen from the forgoing discussion regarding the disclosures of the cited references, there is no reasonable expectation of success provided in any of the references as to the claimed invention and the specific motivation asserted in the Office Action for making the combination is only found in applicant's disclosure.

The Federal Circuit also has indicated that a prior art reference that gives only general guidance and is not all that specific as to particular forms of a claimed invention and how to achieve it, may make a certain approach obvious to try, but does not make the invention obvious. *Ex Parte Obukowicz*, 27 USPQ2d 1063, citing *In re O'Farrell*, 853 F.2d 894, 7 USPQ2d 1673,1681 (Fed. Cir. 1988).

Also, the Federal circuit has stated, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260,1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. *Para-Ordance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.2d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995).

As the Federal Circuit has stated in *In re SANG-SU LEE*, 271 F.3d 1338, 1342-1344; 277 USPQ 2d 1430 (Fed. Cir. 2002):

> The factual inquiry whether to combine references must be thorough and searching." *Id.* It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. *See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229

F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding' ") (quoting *C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed.Cir.1998)); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed.Cir.1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed.Cir.1988) (" 'teachings of references can be combined *only* if there is some suggestion or incentive to do so.' ") (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed.Cir.1984)).

The need for specificity pervades this authority. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed.Cir.2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed.Cir.1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed.Cir.1992) (the

> examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

As indicated herein the motivation for the combination provided in the Office Action is not language found in either Jones or Softly but rather is the language and teachings found in Applicant's invention.

As provided by the Federal circuit, a 35 U.S.C. §103 rejection based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in a reference, is not proper and the prima facie case of obviousness cannot be properly made. In short there would be no technological motivation for engaging in the modification or change. To the contrary, there would be a disincentive. *In re Gordon*, 733 F. 2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Jones and Softly alone or in combination do not teach nor suggest the anti-reflection apparatus of claim 1; in particular the cited art does not provide any teaching or suggestion of an anti-reflection device that can be used with a optical device or lens assembly having a wide-angle field of view and still retain the capability of the lens assembly to provide a complete image and not an image cut-off by the anti-reflection apparatus; and more specifically an anti-reflection apparatus embodying the vane structure in claim 1 that allows the anti-reflection apparatus to be used with a wide-angle field of view lens assembly/optical device and at the same time make any reflections from the optical device/ lens assembly essentially un-viewable to an observer who is distal or remote from the apparatus.

It thus is respectfully submitted that for the foregoing reasons there is no teaching, nor is there any motivation or desires offered in Jones or Softly (alone or in combination) that would suggest to one skilled in the art to take the an anti-reflection shield in Jones and shown in with Figs. 3-9 and to modify the structure of such an anti-reflection shield so as to yield the anti-reflection apparatus as claimed by Applicant which anti-reflection apparatus is particular suited for use with a wide-angle field of view optical device/lens assembly. Thus for the foregoing reasons claims 1, 4, 5, 7, 11, 14 and 15 are patentable over Jones in view of Softly.

SECOND ISSUE

CLAIM 13 IS NOT OBVIOUS WITHIN THE MEANING OF 35 U.S.C. §103 AS BY JONES [USP 4,929,055] IN VIEW OF SOFTLY [USP 4,365,866] AND FURTEHR IN VIEW OF BRENNAN [USP 4,323,298]

As indicated above claim 13, depends from claim 1 and thus at least for this reason, the obviousness rejection of claim 13 is deemed addressed above, in the discussion concerning claims 1, 4, 5, 7, 11, 14 and 15. Thus, and at least for this reason claim 13 is considered patentable over the combination of Jones and Softly.

The grounds for rejection of claim 13 provides that Brennan is cited for the further teaching of what specific angle(s) for a lens so it is considered as having a wide-angle field of view.

It thus is submitted that Brennan does not overcome the shortcomings identified above regarding the rejection of claims 1, 4, 5, 7, 11, 14 and 15.

As such it is respectfully submitted that claim 13 is considered patentable over the combination of Jones, Softly and Brennan.

Respectfully submitted,
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APPENDIX

CLAIM APPENDIX

1. (Previously Presented) An apparatus for reducing reflection on a surface of an optical lens assembly that is configured so as to have a wide field of view (FOV), said surface corresponding to an input end of the lens assembly in which is inputted light of images being viewed, said apparatus comprising:

a plurality of concentric circular vanes, mounted in front of said reflective surface, each of said vanes including a first end proximate said surface, and a second end distal from said lens surface, wherein said first ends of said plurality of vanes are spaced apart from each other at a different distance than said second ends of said plurality of vanes are spaced apart from each other, and wherein said first ends of said plurality of vanes are spaced further apart from each other than said second ends of said plurality of vanes where light from an image to be viewed enters said second ends and exits said first ends and passes to said lens assembly input end; and

wherein said plurality of concentric circular vanes are arranged such that light reflecting from said lens surface is essentially not viewable by an observer located distal from said second ends and so that a user viewing through the lens assembly can observe the image corresponding to the wide field of view of the lens assembly.

4. (Previously Presented) The apparatus of claim 1 wherein said lens assembly is contained within field goggles and wherein said apparatus is configured to be mounted on field goggles.

5. (Original) The apparatus of claim 4 wherein said field goggles include night-vision goggles.

7. (Original) The apparatus of claim 1 further including:

a plurality of radial vanes interconnected with said plurality of concentric circular vanes.

11. (Previously Presented) The apparatus of claim 1, wherein said first ends of said plurality of vanes are spaced apart from each other at a fixed distance and said second ends of said plurality of vanes are spaced apart from each other at a fixed distance.

CLAIM APPENDIX

12. (Previously Presented) An apparatus for reducing reflection on a surface comprising:

a plurality of concentric circular vanes, mounted in front of said reflective surface, each of said vanes including a first end proximate said surface, and a second end away from said surface;

the plurality of concentric circular vanes comprising a center vane and a plurality of outer vanes;

the center circular vane forming a conical tube with the first end having a smaller diameter than the second end; and

the outer vanes being nested concentrically about the center vane such that the plurality of concentric circular vanes have one fixed angle.

13. (Previously Presented) The system of claim 1, wherein the wide angle Field of View (FOV) of an optical lens of said lens assembly is at least 40°.

14. (Previously Presented) The system of claim 1, wherein the plurality of concentric circular vanes are arranged so as to produce tubes with a length-to width ratio greater than the length to width ratio of the FOV.

15. (Previously Presented) An apparatus for reducing reflection from a surface of a wide angle Field of View (FOV) optical lens assembly, said apparatus comprising:

a plurality of concentric circular vanes, mounted in front of said reflective surface, each of said vanes including a first end proximate said surface, and a second end away from said surface, wherein said first ends of said plurality of vanes are spaced apart from each other at a different distance than said second ends of said plurality of vanes are spaced apart from each other, wherein said plurality of concentric circular vanes are arranged such that light reflecting from said lens surface is essentially not viewable by an observer located distal from said second ends and so that a user viewing through the wide FOV lens assembly can view an image

CLAIM APPENDIX

corresponding to the wide field of view of the lens assembly, whereby a wide field of view through the reflective surface is maintained.

EVIDENCE APPENDIX

Tab A	Copy of Figs. 6-15 of the subject application
Tab B	Copy of USP 4,929,055
Tab C	Copy of USP 4,365,866
Tab D	Copy of USP 4,323,298

A

FIG. 6

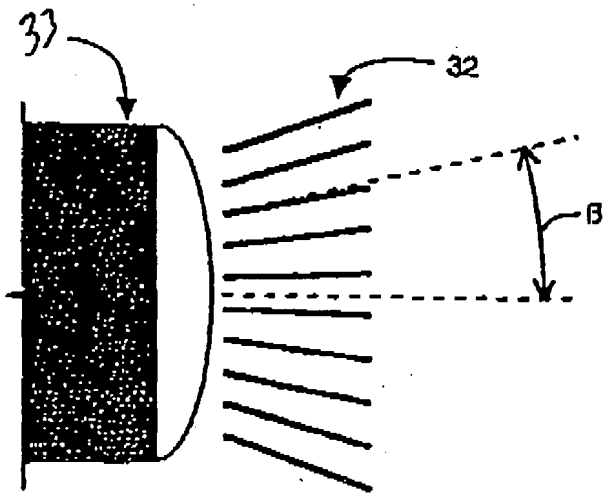


FIG. 7

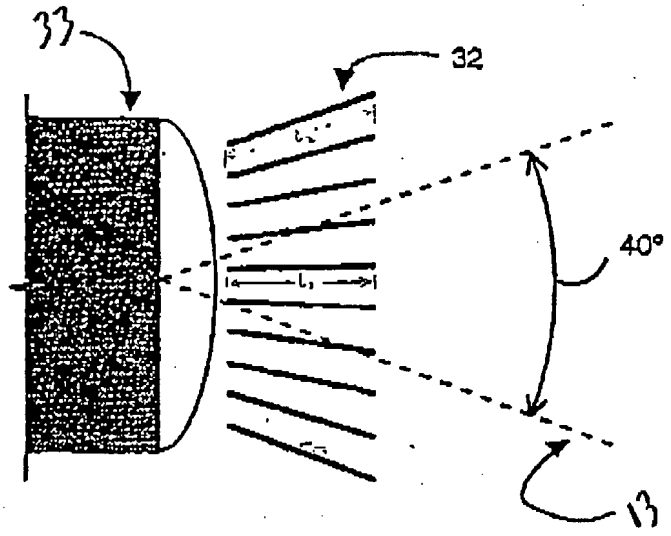


FIG. 8

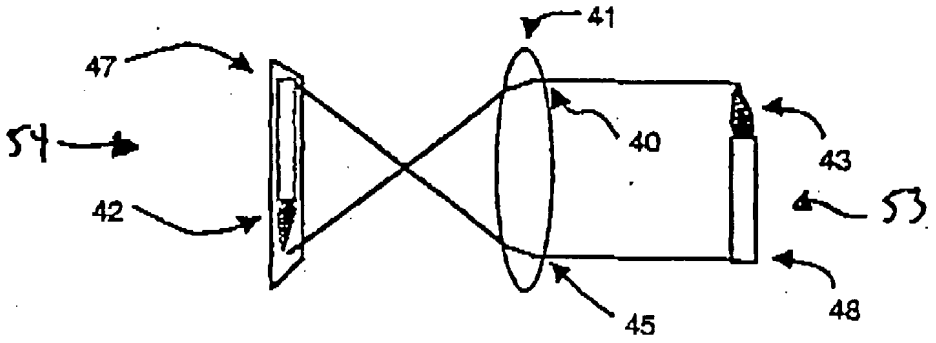


FIG. 9

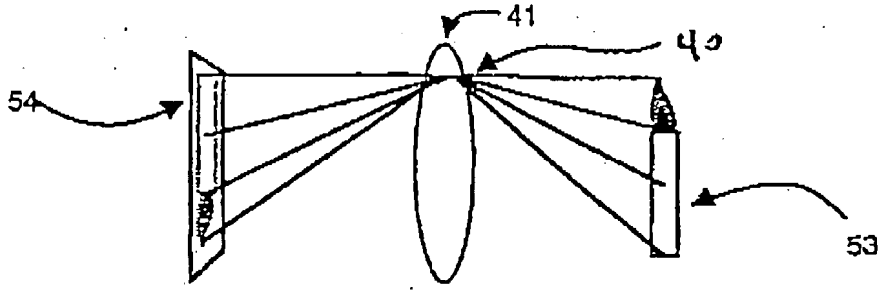


FIG. 10

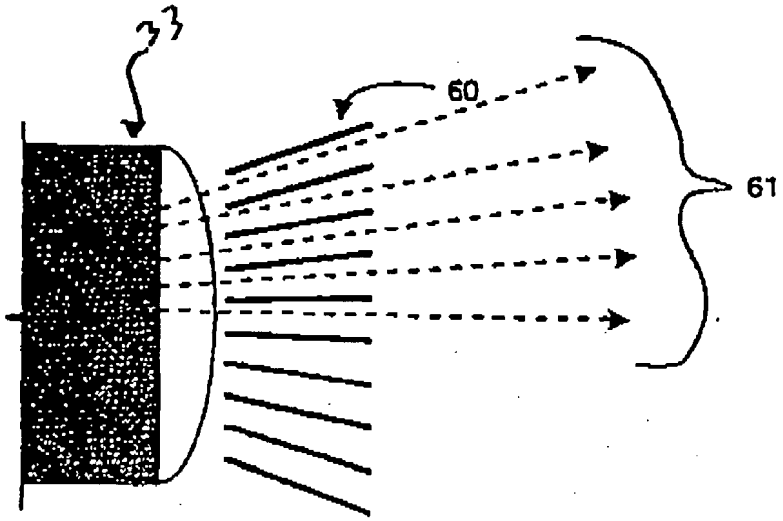


FIG. 11

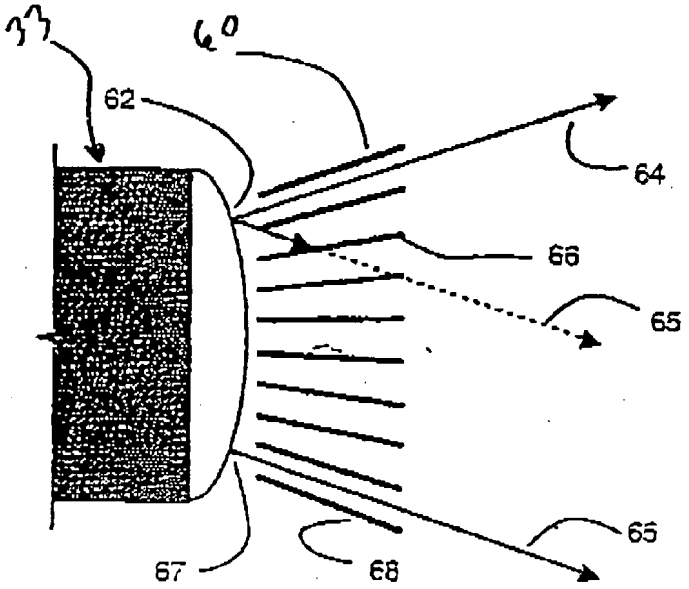


FIG. 12

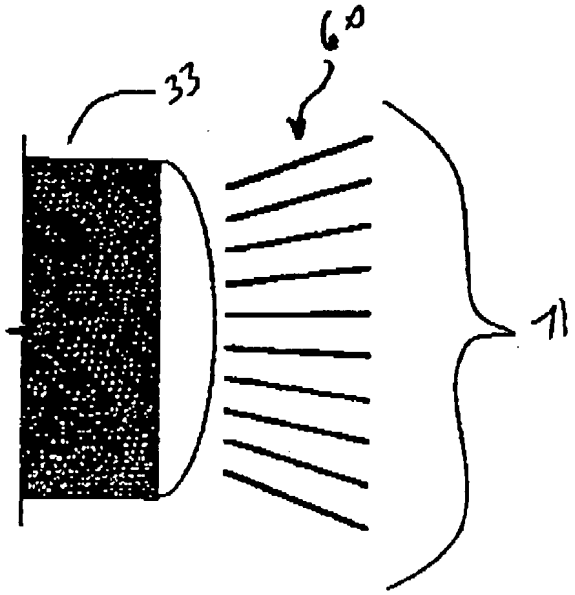


FIG. 13

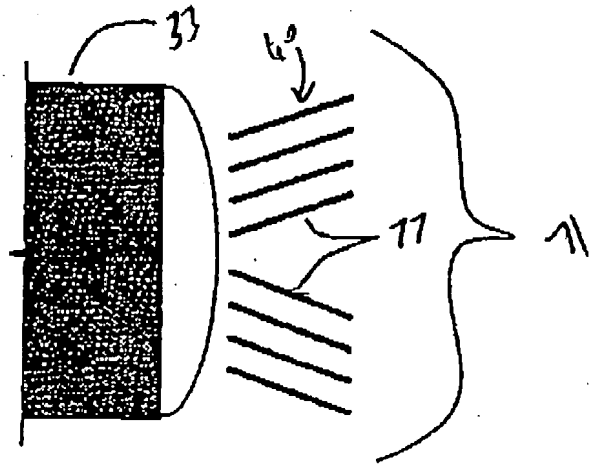


FIG 14

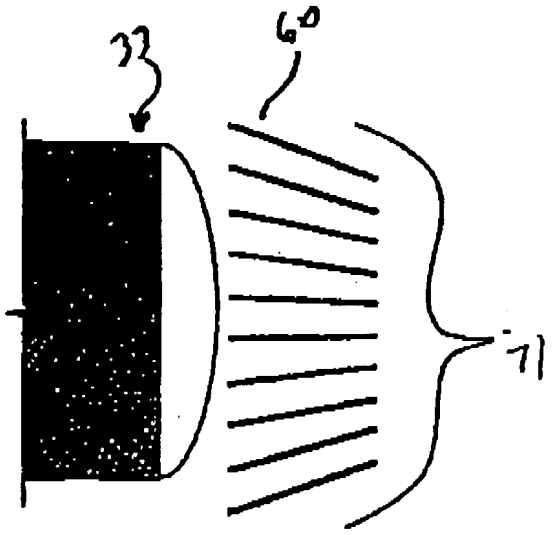
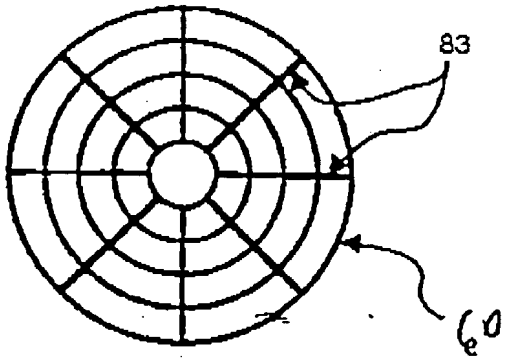


FIG 15



B

C

D

RELATED PROCEEDINGS APPENDIX

None